

## CLAIMS

1. A process for encapsulating a liposoluble active principle in nanocapsules by preparing an emulsion,  
5 characterized in that:
- a) an aqueous phase and a fatty phase are provided,
  - b) the temperature of the two phases is raised to a temperature above the phase inversion temperature,
  - c) the two phases are mixed together,
  - 10 d) the liposoluble active principle is incorporated into the liposoluble phase,
  - e) the temperature is lowered to the phase inversion temperature,
  - f) once the phase inversion is effective and the  
15 emulsion is in the aqueous continuous phase, the emulsion obtained is annealed to lower its temperature.
2. The process as claimed in claim 1, characterized  
20 in that step c') is performed, which consists in lowering the temperature to a temperature immediately above the phase inversion temperature before incorporating the active principle.
- 25 3. The process as claimed in claim 1, characterized in that step c) is performed before step b).
4. The process as claimed in one of the preceding claims, characterized in that the emulsion obtained is  
30 then concentrated by withdrawal of some of the aqueous phase.
5. The process as claimed in one of the preceding claims, characterized in that step e) is performed by  
35 adding an additional amount of aqueous phase brought to a temperature below the phase inversion temperature.
6. The process as claimed in any one of the preceding

claims, characterized in that the active principle is dissolved in an additional amount of fatty phase before being incorporated into the system.

- 5    7.    The process as claimed in any one of the preceding claims, characterized in that the active principle is chosen from the group consisting of liposoluble vitamins such as retinol, retinoids, vitamin E and carotenoids, polyphenols and fragrance components.

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8.    An emulsion that may be obtained via a process as claimed in any one of the preceding claims, characterized in that the size of the nanocapsules is on average less than 300 nm.